

Title (en)

Assessment of shear forces distribution at fixation points of textile-based implants

Title (de)

Beurteilung der Scherkräfteverteilung an Befestigungsstellen von textilbasierten Implantaten

Title (fr)

Évaluation de la répartition des forces de cisaillement au niveau des points de fixation d'implants à base de textile

Publication

EP 3002580 A1 20160406 (EN)

Application

EP 14306543 A 20140930

Priority

EP 14306543 A 20140930

Abstract (en)

A system for assessing the distribution of shear forces at fixation points on a textile-based implant includes a tissue model, a load simulation device, and an analysis system. The tissue model includes an upper surface defining an opening therethrough and a fixation support configured to secure a textile-based implant against the upper surface at a plurality of fixation points defined along a plane of the upper surface. The load simulation device is configured to apply a load to a textile-based implant that is secured to the tissue model. A marker is disposed on the fixation support at one or more of the plurality of fixation points. The analysis system is configured to calculate a shear force vector at each of the fixation points where a marker is disposed in response to the load applied by the load simulation device.

IPC 8 full level

G01N 3/06 (2006.01); **G01N 3/08** (2006.01); **G01N 3/24** (2006.01); **G01N 33/36** (2006.01)

CPC (source: EP US)

A61F 2/0063 (2013.01 - US); **G01B 11/16** (2013.01 - US); **G01L 5/00** (2013.01 - US); **G01N 3/068** (2013.01 - EP US); **G01N 3/08** (2013.01 - EP US); **G01N 3/24** (2013.01 - EP US); **A61F 2240/008** (2013.01 - EP US); **G01N 33/367** (2013.01 - EP US); **G01N 2203/0282** (2013.01 - EP US); **G01N 2203/0494** (2013.01 - EP US); **G01N 2203/0647** (2013.01 - EP US)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3002580 A1 20160406; **EP 3002580 B1 20190911**; AU 2015221547 A1 20160414; AU 2015221547 B2 20200827; CN 105466789 A 20160406; CN 105466789 B 20200512; US 10168238 B2 20190101; US 2016091375 A1 20160331; US 2018202877 A1 20180719; US 9958347 B2 20180501

DOCDB simple family (application)

EP 14306543 A 20140930; AU 2015221547 A 20150904; CN 201510641359 A 20150930; US 201514862763 A 20150923; US 201815920614 A 20180314